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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/500,229

06/25/2004

Raimund Kram

03869-105012

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08/09/2011

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EXAMINER

HARTMAN JR, RONALD D

ART UNIT

PAPER NUMBER

2121

NOTIFICATION DATE

DELIVERY MODE

08/09/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

AustinUSPTO@kslaw.com  
AustinIP@kslaw.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/500,229	<b>Applicant(s)</b> KRAM ET AL.
	<b>Examiner</b> RONALD HARTMAN JR	<b>Art Unit</b> 2121

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 July 2011.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 23-28,32-36,39,40,42-44 and 52-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-28,32-36,39,40,42-44 and 52-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/1/2011 has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 23-28, 32-36, 39-40, 42-44 and 52-56 are rejected under 35 U.S.C. 102(e) as being anticipated by Heber et al., U.S. Patent Application Publication No. 2003/0078692.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Claim 23 recites a system comprising a movement profile stored in a memory. The profile has the following characteristics: It a function of higher degree; its comprised of a command variable and a secondary variable; the command variable is different than the secondary variable; one of the variables is time or location dependent; the profile is unit less; is composed of plural segments formed via mathematical functions; and two unconnected polynomial functions can be connected with a transitional spline interpolation segment.

Heber et al. discloses curves, in the form of prepared profiles, for controlling the movement of machine elements that are represented using points or simple polynomial functions ([0002]). Further, that consecutive movement sections are defined by segments and that interpolation between the segments is carried out according to an interpolation rule ([0007]). Further, that a combination of a polynomial having a degree of at least 6 and a sinusoidal function have proved to be particularly favorable for defining the segments ([0010]). Further, that the use of cubic splines or Bezier splines for the connecting segments is particularly advantageous ([0011]). Further, the profile appears to be defined in a “unit less” manner that is composed of at least two variables that are at least location dependent ([0031]).

As per claim 24, since Heber et al. discloses the use of the movement profiles, they inherently must be created before they are utilized, and therefore the profile being created is inherent to Heber et al.

As per claim 25, as previously mentioned, Heber et al. adequately discloses the use of spline interpolations of higher degree ([0007], [0010] and [0011]).

As per claim 26, as previously mentioned, Heber et al. adequately discloses polynomial interpolations ([0007], [0010], [0011] and [0031]).

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As per claim 27, as previously mentioned, Heber et al. adequately discloses a polynomial interpolation of up to a 6<sup>th</sup> order ([0010]).

As per claim 28, Heber et al. discloses the utilization of a trigonometric element ([0009]).

As per claim 32, Heber et al. discloses the movement along an axis ([0012], [0036] and [0041]).

As per claim 52, accessing the profile from memory is inherent to Heber et al. since Heber et al. discloses the profiles being stored in a memory ([0002]).

As per claim 53, Heber et al. discloses a variable being representative of a position (Figure 1 and [0007], [0010], [0011] and [0031]).

As per claim 33, the rejection of claim 23, from above, is applied herein.

As per claim 34, the rejection of claim 25, from above, is applied herein.

As per claim 35, the rejection of claim 26, from above, is applied herein.

As per claim 36, the rejection of claims 28, from above, is applied herein.

As per claims 39 and 40, the rejection of claim 32 and 53, from above, are applied herein.

As per claim 42, a program that is used by a user is inherent to Heber et al.

As per claim 43, a graphic tool is inherent to Heber et al.

As per claim 44, the rejection of claim 23, from above, is applied herein.

As per claim 54, the rejection of claim 23, from above, is applied herein.

As per claim 55, the rejection of claim 23, from above, is applied herein.

As per claim 56, the rejection of claim 32, from above, is applied herein.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RONALD HARTMAN JR whose telephone number is (571)272-3684. The examiner can normally be reached on Mon (12pm - 8pm), Tues (4pm - 8pm) and Fri (12pm - 8pm) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ronald D Hartman Jr./  
Primary Examiner  
Art Unit 2121

August 2, 2011